NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

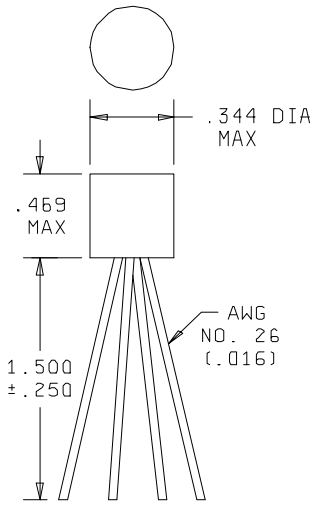
MIL-PRF-27/96
12 May 1976

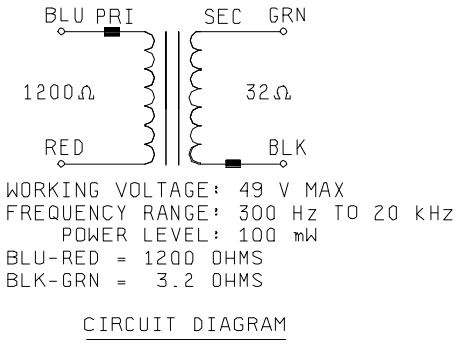
PERFORMANCE SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY, SUB-MINIATURE, TF5R21ZZ915

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the transformer described herein shall consist of this document and the latest issue of specification MIL-T-27.





CIRCUIT DIAGRAM

INCHES	MM
.344	8.74
.469	11.91
1.500	38.10

NOTES:
1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. The number of terminals shall be as shown in circuit diagram.
4. For vibration and shock test the specimen shall be rigidly mounted on a printed circuit board.

FSC 5950

REQUIREMENTS:

Electrical ratings:
  Primary power level - 100 mW.
  Working voltage - 49 V maximum.
  Primary current - 2 mAdc.
  Primary impedance - (BLU-RED) 1200 ohms.
  Secondary load impedance - (BLK-GRN) 3.2 ohms.

Design and construction:
  Dimensions and configuration: See figure.
  Duty cycle: Continuous.
  Terminals: Solid wire, insulated.
    Material - Insulated type D, per MIL-STD-1276.
    Diameter - 0.016 inch.
    Length - 1.500 inches ±0.250.
  Weight: 3.5 grams.
  Operating temperature range: -55°C to +105°C.
  Altitude: 70,000 feet.

Terminal strength: Method 211 of MIL-STD-202, test condition A, 2 pounds.

Dielectric withstanding voltage:
  At sea level - 100 Vrms.
  At reduced barometric pressure - 100 Vrms.

Electrical characteristics:
  Primary impedance: (BLU-RED) 1200 ohms with approximately 11 volts, 1 kHz and 2 mAdc applied to (BLU-RED) and 3.2 ohms across (BLK-GRN).
  Harmonic distortion: Total harmonic content of output 5% with 11 volts, 1 kHz and 2 mAdc applied to (BLU-RED).
  Resonance: Second resonant frequency -20 kHz minimum.
  Frequency response: Z_S=1200 ohms (BLU-RED); Z_L = 3.2 ohms (BLK-GRN); E_S=2.5 volts; reference frequency = 1 kHz, frequency range = 300 Hz to 20 kHz ±3 dB.
  Polarity: Additive, with terminals RED and BLK connected.

Vibration high frequency: MIL-STD-202, method 204, test condition B.

Part number: M27/96-01.

Custodians:
  Army - EL
  Navy - EC
  Air Force - 85

Review activities:
  Army - EL, MI, SG
  Navy - EC, SH, OS
  Air Force - 11, 17, 80
  DSA - ES

User activities:
  Army - MU, WC, SG, ME
  Navy - MC, AS, SH, OS
  Air Force - 19

Preparing activity:
  Army - EL

Agent:
  DSA - ES

(Project 5950-0508-1)